

Collection at City Government Facilities and City Schools

The City provides MSW trash collection service weekly at the City Hall, Community Center, Mary Riley Styles Public Library, Property Yard, and Aurora House Girls' Home. Each of these buildings uses dumpsters that are emptied using front-end trucks. The City also provides recycling of the following items at each of these facilities: mixed paper, newspaper, cardboard, food and beverage cans, glass bottles and jars, plastic bottles and jugs, and printer cartridges. Collection containers are placed at various locations within the buildings and are collected by the following recycling contractors: ERI (office paper), United Refuse (mixed paper, newspaper, cardboard, food and beverage cans, glass bottles and jars, plastic bottles and jugs), and Recycle Ink (printer cartridges).

Waste Management, Inc., provides MSW trash collection from the Falls Church City Public Schools. Dumpsters located at Mt. Daniel and Thomas Jefferson Schools are emptied three times per week, while those at George Mason Middle/High School (GMHS) are emptied daily from Monday through Saturday. ERI collects mixed paper weekly from each of the schools, as well as newspaper from GMHS. Cardboard, cans, and bottles are transported by school personnel from Mt. Daniel and Thomas Jefferson Schools to recycling dumpsters at GMHS. Waste Management collects these materials on a weekly basis.

The City projects annual MSW collection volumes (excluding yard waste and special wastes) will increase between 17 and 54 percent from 2004 to 2025, assuming continuation of current waste management practices.

Assessment of Current and Future Collection Needs

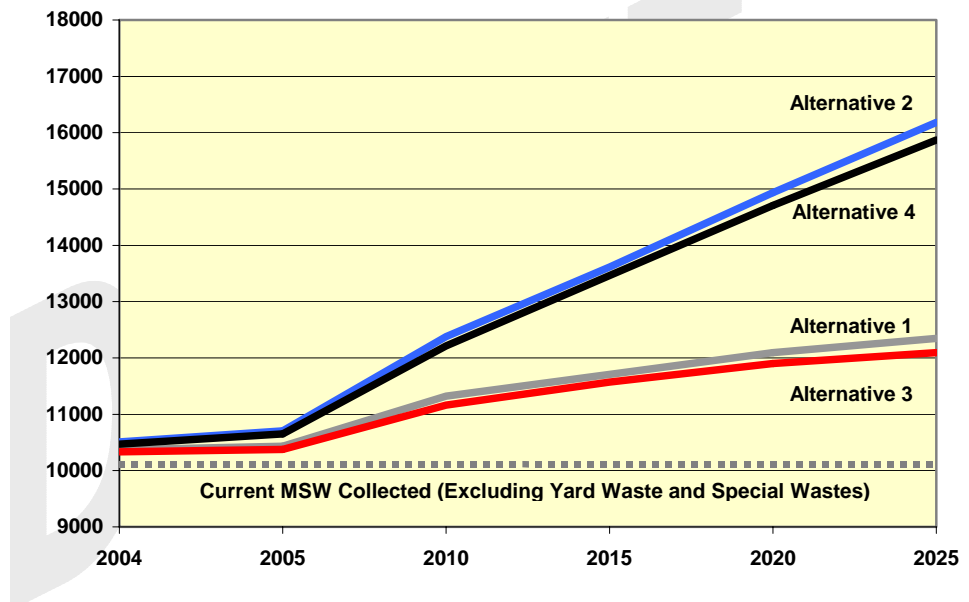
Chapter 2 of this SWMP presents the projected quantities of MSW generated, recycled, and disposed in the City of Falls Church over the SWMP planning period. The City developed four alternative waste projections to address the probable range in the future generation rates. A detailed discussion of the development of MSW waste projections is provided in Appendix A.

Collection of MSW includes both recyclable materials and waste destined for disposal. Table 6-8 and Figure 6-3 show the projected quantities of MSW collected in the City over the SWMP planning period for the four projection alternatives (described in detail in Appendix A). These MSW collection projections do not include yard waste and special wastes. **(Note that these projections assume the continuation of the City's current management practices and conditions.)** The City projects that the annual quantities of MSW collected in the City of Falls Church will increase between 17 and 54 percent from 2004 to 2025.

Table 6-8. MSW Collection Projections (Excluding Yard Waste and Special Wastes) in the City of Falls Church, 2004–2025 (tons)

Calendar Year	Alternative 1		Alternative 2		Alternative 3		Alternative 4	
	MSW Recycling	MSW Disposal	MSW Recycling	MSW Disposal	MSW Recycling	MSW Disposal	MSW Recycling	MSW Disposal
2004	3,792	6,581	3,863	6,647	3,773	6,561	3,844	6,626
2005	3,821	6,609	3,965	6,741	3,794	6,580	3,937	6,713
2010	4,279	7,045	4,828	7,553	4,202	6,964	4,745	7,467
2015	4,475	7,232	5,466	8,149	4,409	7,163	5,391	8,071
2020	4,672	7,419	6,148	8,787	4,578	7,322	6,037	8,671
2025	4,802	7,544	6,795	9,390	4,679	7,414	6,641	9,229

Figure 6-3. MSW Collection Projections (Excluding Yard Waste and Special Wastes) in the City of Falls Church 2004–2025 (tons)



The City's MSW collection system (excluding yard waste and special wastes) must handle an additional 1,760 to 5,680 tons per year by 2025.

The City projects that the current MSW collection system (excluding yard waste and special wastes) must handle an additional 1,760 to 5,680 tons per year by 2025. Therefore, the existing collection system may have to expand, by adding collection vehicles and labor, to meet the increased quantities.

SWMP Actions

Table 6-9 shows the City's SWMP actions for the collection of MSW. The City selected SWMP actions based on their alignment with the SWMP goals (in Chapter 4) and their ability to close the gaps between the City's current SWM system and that required in the future. These SWMP actions are discussed in more detail in Chapter 11.

Table 6-9. City of Falls Church MSW Collection SWMP Actions

MSW Collection SWMP Actions
<ul style="list-style-type: none"> – Maintain City refuse collection – Implement a Pay-As-You-Throw collection system – Expand collection of electronic wastes – Promote use of special fuels, filters, and special vehicles for collection

Transfer

The City of Falls Church uses transfer facilities outside of the City including Fairfax County's I-66 Transfer Station and three privately-owned MRFs.

The City of Falls Church utilizes Fairfax County's I-66 Transfer Station for handling MSW. The City also uses three MRFs in the area (but outside of the City) for handling MSW recyclables, which are discussed in earlier in this chapter.

I-66 Transfer Station

Fairfax County operates a single transfer station, the I-66 Transfer Station, which is regulated under VDEQ Permit #387. The facility accepts, from public and private haulers operating throughout the county, MSW, yard debris, brush, CDD (from small businesses and homeowners), and white-goods for transfer or processing. In addition, the county also operates a disposal collection facility at the I-66 Transfer Station that accepts MSW directly from City of Falls Church citizens and businesses. (Above, see "Collection," "Disposal Centers.") The facility is located near the center of Fairfax County, at the site of the closed I-66 Landfill.



The I-66 Transfer Station has two main objectives: (1) managing MSW quantities disposed of at the county's waste-to-energy facility, the Energy/Resource Recovery Facility (E/RRF), and (2) minimizing solid waste disposal transportation requirements.

The operation of the E/RRF requires a constant feed of MSW, so Fairfax County must provide it with a contracted amount (930,750 tons annually). By consolidating the majority of MSW collection and transfer at the I-66 Transfer Station, the county is able to control the MSW volume delivered to the E/RRF. If MSW quantities entering the system are greater than the E/RRF processing capacity, then the county can transport the "overflow" waste from the transfer station to sanitary landfills outside of the county.

The I-66 Transfer Station also enables the county to reduce MSW disposal transportation requirements, primarily for private and municipal haulers. First, haulers have the option of using the I-66 Transfer Station or hauling waste directly to the E/RRF, whichever provides the most convenient transportation solution. Typically, haulers in the northern and western portions of the county use the transfer station; others haul directly to the E/RRF.

Second, the county consolidates typically three to five smaller truckloads into a single trailer for transportation to the E/RRF and out-of-county landfills. Consolidation at the transfer station enables the county to reduce the truck traffic to the E/RRF.

The I-66 Transfer Station commenced operations in January 1983. In early 1991, the county began planning the expansion of the original transfer station, including a new area for residential recycling and disposal. The multi-year project cost approximately \$13.1 million and included the expansion of the number of disposal bays, as well as repairs to the original transfer station building. This project included the completion of the recycling and disposal facility in 1993 and the tipping building expansion in 1997.



The I-66 Transfer Station charges fees based upon the amount of MSW disposed.

The I-66 Transfer Station charges fees based upon the amount of MSW disposed. The fees vary based upon the type of waste and the category of the disposer. Haulers that enter into a contract with the county and meet specific eligibility requirements (such as obtaining proper county permits) are currently charged a lower fee. All fees finance the transport and disposal of the refuse at the E/RRF or landfill as well as costs for administration and other community benefit programs, such as recycling and household hazardous waste.

The facility operates with 52 transfer vehicles, 74 drivers, other operations staff, and contract hauling support. Drivers typically work on rotating shifts 10 hours a day for 4 days a week.

Vehicle Processing

Incoming vehicles to the transfer station may include private haulers, municipal haulers, commercial cash customers, and residents.

Private and Municipal Haulers

All trash hauling vehicles entering the transfer facility have permits from Fairfax County. The permit types vary according to the size of the hauling company, with large hauling companies invoiced monthly. The county requires hauling companies that are billed monthly to obtain a security

Incoming vehicles to the transfer station may include private haulers, municipal haulers, commercial cash customers, and residents.

bond to cover outstanding debt and failures to perform waste collection requirements.

Each entering trash hauling vehicle must display its unique permit number. Upon entering, the facility retrieves information from the computer scale system, including tare weight and owner name and address. All trash hauling vehicles are weighed on an electronic scale, which records the date, time, weight, and charge. The system prints a waste receipt, including the vehicle owner's name and address, and the type of waste. The system tracks charges and bills owners monthly.



The I-66 Transfer Station is open for private and municipal haulers Monday through Friday from 5 A.M. to 6 P.M. and Saturdays from 5 A.M. to 2 P.M. The peak hours for incoming vehicles are 4 P.M. to 5 P.M. Other peak volumes are from 11 A.M. to 1 P.M. and 7:30 A.M. to 9 A.M.

Commercial Cash and Citizens

Small companies that do not desire a monthly invoice and generate waste as part of their regular work (landscaping, roofing or remodeling businesses, for example) may pay cash for disposal services (commercial cash program). They pay either a flat fee per visit or by weight for larger loads.

City residents who use the facility pay for disposal on the basis of the number of bags (for smaller loads), by weight (for larger loads), or by item (white goods, tires). The disposal center for citizens and commercial cash customers at the I-66 Transfer Station is also open Sundays, and has slightly different operation hours than the hours for collection and disposal vehicles.

Refuse Handling



After processing at either the main scales or commercial cash/citizens scales, the vehicles are directed to one of the 21 bays to discharge the waste (10 bays in one building and 11 bays in the adjacent building). Waste is emptied from the vehicles onto the floor of the bay; county operators in front-end loaders inspect the waste and move it toward the pits at the back of the bays. This type of facility is known as a direct-discharge non-compaction station.

Vehicles are randomly screened for prohibited wastes, including regulated medical waste (RMW) and hazardous wastes. Crane operators and other employees continuously screen refuse in the bays.

Waste is loaded into the waiting 18-wheel tractor-trailers beneath the floor through one of the six pits at the back of the bays. Cranes behind the pits assist in directing the waste into the trailers.

Outgoing Vehicles

After discharging their wastes, all vehicles leave the facility.

Transfer Operations

Once the transfer trailers are loaded, they pull out of the facility; the operator removes loose or hanging refuse from the trailer, closes the trailer top, and proceeds to the E/RRF or landfill. Vehicles are typically weighed when they arrive at the disposal facility rather than at the I-66 Transfer Station; drivers, however, may weigh their vehicles at the transfer station if they believe the load may be too heavy.

In 2002, the I-66 Transfer Station accepted 663,819 tons of material. The average daily refuse received was approximately 2,100 tons (based on operations 6 days per week). Table 6-10 shows the quantities of MSW received at the I-66 Transfer Station and destination for disposal from 2000 to 2002.

Table 6-10. I-66 Transfer Station, Tons of MSW Transferred, 2000–02

Category	2000	2001	2002
Inbound MSW			
Haulers	579,437	646,298	635,825
Falls Church MSW	N/A	6,254	6,769
Non-Falls Church MSW	N/A	640,044	629,156
Disposal for citizens	30,556	26,526	27,994
Outbound MSW			
E/RRF	560,965	595,853	628,348
Out-of-county landfills	49,028	76,971	35,471
Total	609,993	672,824	663,819

N/A - Data Not Available

The City of Falls Church projects annual volumes of City-generated MSW handled at the Fairfax County's I-66 Transfer Station (excluding yard waste and special wastes) will increase between 13 and 41 percent from 2004 and 2025, assuming continuation of current waste management practices.

Assessment of Current and Future Transfer Needs

Chapter 2 of this report presents the projected quantities of MSW generated, recycled, and disposed in the City over the SWMP planning period. The City developed four alternative MSW projections to address the probable range of variance in the future generation rates.

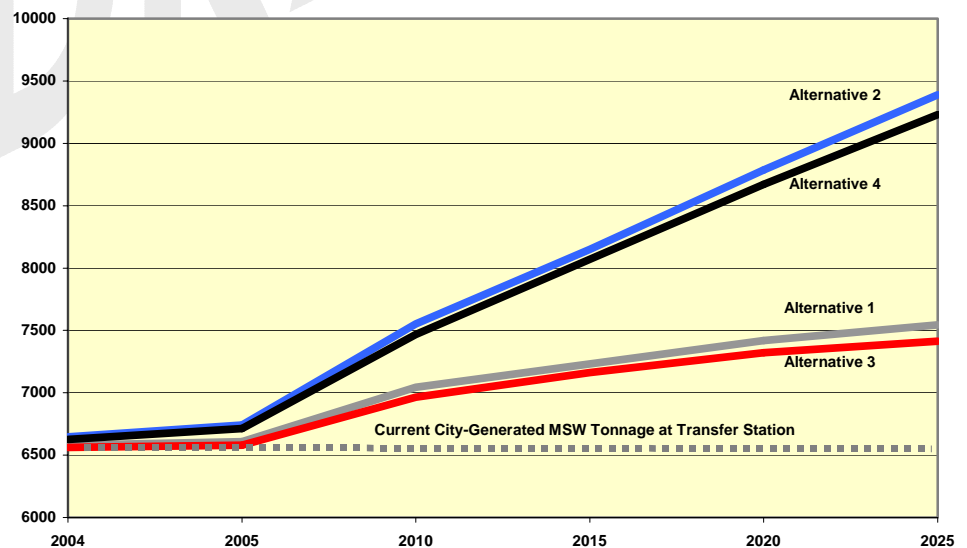
Future projections of City-generated MSW handled at the I-66 Transfer Station are dependent on two factors: (1) the percent of MSW recycled and (2) the projected amounts of MSW destined for disposal. Projected amounts of MSW destined for disposal over the SWMP planning period are presented in Chapter 2.

Table 6-11 and Figure 6-4 show the projected quantities of MSW managed at Fairfax County's I-66 Transfer Station over the SWMP planning period for the four projection alternatives. **(Note that these projections assume the continuation of the City's current management practices and conditions.)** The City projects that annual quantities of City-generated MSW managed at the I-66 Transfer Station will increase between 13 and 41 percent from 2004 to 2025.

Table 6-11. Future Projections of City-Generated MSW Handled at Fairfax County's I-66 Transfer Station, 2004–2025 (tons)

Year	City of Falls Church MSW Sent to I-66 Transfer Station			
	Alternative 1	Alternative 2	Alternative 3	Alternative 4
2004	6,581	6,647	6,561	6,626
2005	6,609	6,741	6,580	6,713
2010	7,045	7,553	6,964	7,467
2015	7,232	8,149	7,163	8,071
2020	7,419	8,787	7,322	8,671
2025	7,544	9,390	7,414	9,229

Figure 6-4. Projections of City-Generated MSW Handled at I-66 Transfer Station 2004–2025 (tons)



Fairfax County's I-66 Transfer Station must handle an additional 850 to 2,700 tons of City-generated MSW (excluding yard waste and special wastes) per year by 2025.

The City projects that the I-66 Transfer Station must handle an additional 850 to 2,700 tons per year of City-generated MSW by 2025. Fairfax County expects the I-66 Transfer Station to have sufficient capacity to handle projected quantities of City- and county-generated MSW, with the exception of Alternative 4. For Alternative 4, MSW quantities will exceed the current I-66 Transfer Station capacity between 2020 and 2025.